

GLAZUNOV, V.N.; IVANOV, K.I.; KLOCHKO, N.A.; KUDRYA, N.A.; USHKOV, N.N.

Foreign tools for drilling slim holes. Gor. zhur. no.8:39-42  
Ag '62. (MIRA 15:8)  
(Boring machinery)

*KLOCHKO, Nikolay Aleksandrovich*

PHASE I BOOK EXPLOITATION 976

Shreyner, Leonid Aleksandrovich, Petrova, Ol'ga Pavlovna, Yakushev,  
Vasiliy Petrovich, Portnova, Anna Timofeyevna, Sadilenko, Konstantin  
Mikhaylovich, Klochko, Nikolay Aleksandrovich, Pavlova, Nina Nikola-  
yevna, Balandin, Pavel Stepanovich, Spivak, Aleksandr Ivanovich

Mekhanicheskiye i abrazivnyye svoystva gornykh porod (Mechanical and  
Abrasive Properties of Rocks) Moscow, Gostoptekhizdat, 1958. 200 p.  
3,000 copies printed.

Gen. Ed.: Shreyner, L.A., Professor; Executive Ed.: Kovaleva, A.A.;  
Tech Ed.: Polosina, A.S.

PURPOSE: The book is intended for scientists, engineers and technicians  
engaged in drilling operations in the petroleum and mining industries.

COVERAGE: The book describes methods of evaluating the mechanical pro-  
perties of rocks by means of the stamp-pressing technique. This meth-  
od makes it possible to determine simultaneously the hardness, plas-

Card 1/6

## Mechanical and Abrasive (Cont.) 976

ticity, and elastic modulus of rocks. Rocks of different mineralogical composition and structure are described and classified by their abrasive properties. Basic factors in the relationship of wear on the mineralogical composition, load, and speed of rotation are shown. A classification table of sedimentary rocks is also given. The information provided in the book should promote the better use and design of drilling instruments, and operational procedures in different geologic media. Professor V.V. Zalevskiy is cited as having made important contributions to this field. There are 64 diagrams, 70 tables, and 39 bibliographic references, of which 28 are Soviet, 3 German and 8 English.

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**Card 5/6**

KLOCHKO, N.A., inzh.; MAKHOTKIN, M.V., inzh.; SUSLOV, Ye. I., inzh.

Welding of hard alloy tips with intermediate layers onto de-  
tachable rock drill bits. Gor. zhur. no.4:33-35 Ap '60.  
(MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh  
splavov, Moskva.

: (Rock drills)  
(Hard facing)

KLOCHKO, N.A.; SHREYNER, L.A.

Using bits with cutters made of hard-alloy grains in thermomechanical  
core drilling. Inv.vys.ucheb.zav.; geol.i razv. 6 no.3:113-117  
Mr '63. (MIRA №:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.  
(Core drilling)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723210007-9

KUCHEROVA, N.K.; VIDOMENKO, V.R.; KLOCHKO, N.A. [Klochko, N.O.]

New toe puff materials for cemented footwear. Leh. prom. no.38  
29-30 JI-8 '65. (MIRA 18:9)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723210007-9"

KLOCHKO, N.A.; MAKHOTKIN, M.V.; MOINOVA, N.V.

Selecting a type of steel and conditions of brazing hard alloy  
tips in the manufacture of bits for air hammers. Gor. shur.  
no. 12:41-44 D '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh  
splavov, Moskva.

KLOCHKO, Petr Dmitrievich, GRECHKO, G.S. [Krechko, H.S.], red.;  
LYANOVA, M.I. [Lymanova, M.I.], tekhn. red.

[Fattening cattle on a specialized farm] Vidhodivlia kuh-  
doby v spetsializovannomu hospodarstvi. Kharkiv, Kharkivs'-  
ke knyshkove vyd-vo, 1963. 24 p. (MIRA 17:1)

KLOCHKO, P.P., docent, kandidat tehnicheskikh nauk.

Designing compensated three-dimensional links. Nauch. trudy NPI  
30(44):149-173 '55. (MLRA 9:11)  
(Machinery, Kinematics of)

KLOCHKO, V.A., inzh.; KARIUS, N.G., inzh.; NEGRUTSKIY, B.F., inzh.;  
OLENEV, G.A., inzh.

Automatic ventilation units in mines. Mekh. i avtom. proizv.  
17 no.12:8-11 D'63.  
(MIRA 17:2)

KLOCHKO, V.A.

At the Yana Dolomite Comine. Ogneupory 29 no. 71292-293 '64.  
(MIRA 18-1)  
1. Yanskij dolomitnyj kombinat.

KLOCHKO, V.G., polkovnik, voynnyy letchik pervogo klassa

Preparing for flights according to the type of mission.  
Vest. Vozd. Fl. no. 4835-38. Ap '60. (MIRA 13:8)  
(Flight training)

KLOCHKO, V.P., inshener.

Reinforced concrete block conduits for wire and cables., Prom. energ.  
12 no. 4:20-24 Ap '57. (MLRA 10:5)

1. Trest "Kabelelektromontazh".  
(Concrete conduits) (Electric wiring)

KLOCHKO, V.S.

Homogram for selecting the form of triangle used in determining  
inaccessible distances. Geod. i kart. no. 8:71-72 0 '56.

(Triangulation)

(NLRB 10:1)

~~Klochko, IVS  
KLOCHKO, V.S.~~

Letters to the editor. Geod.i kart. no.9:75-77 & '57. (MIRA 10:11)

1. Vodokanalprojekt, Khar'kov.  
(Cartography)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723210007-9

KLOCHKO, V.S.

Vertical alignment of structures. Prcm. stroi. 42 no. 6:  
43-45 '65. (MIRA 18:12)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723210007-9"

93-4-10/20

AUTHOR: Klochko, V. S.

TITLE: Some Indices Reflecting the Efficiency of Pressure-Maintainance Methods Used at the Krasnodarneft' Oil Fields (Nekotoryye pokazateli ekonomicheskoy effektivnosti metodov podderzhaniya plastovogo davleniya na promyslakh Krasnodarnefti)

PERIODICAL: Neftyanoye khozyaystvo,<sup>15</sup> Nr.4, April 1957, pp.37-42 (USSR).

ABSTRACT: In order to develop the Krasnodarneft' (State All-Union Association of the Krasnodar Oil and Gas Industry) oil fields and raise the output of individual formations, their pressure has been maintained artificially for the last 10 years. As a result, an additional 2,764 thousand tons of crude oil have been recovered, of which 2,216 thousand tons by the Khadyzhenneneft', 473 thousand tons by the Chernomorneft', and 73 thousand tons by the Abinneft'. The above mentioned Administrations began their injection operations in 1945, 1951 and 1953, respectively. The total sum expended for the artificial maintenance of pressure in the formations amounted to 160 million rubles, including the cost of converting production wells to injection wells. Table 1 shows a detailed breakdown of this sum as recorded by Khadyzhenneneft', Chernomorneft' and

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APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723210007-9  
Some Indices Reflecting the Efficiency of Pressure-Maintainance Methods Used at the Krasnodarneft' Oil Fields. (Contd)

93-4-10/20

Abinneft'. Table 2 shows the cost of 1 cu. m water, or 1,000 cu. m gas, or air used for maintaining the required formation pressure as recorded by the Khadyzhenneneft', Chernomorneft', and Abinneft' Administrations. In this case the total cost amounted to 28,970 thousand rubles in 1955 and 31,753 thousand rubles in 1956. The author maintains basing himself on the data in Table 2, that by increasing the volume of air and gas pumped into the formations the cost of the driving medium was reduced 11.4% as compared with 1955 figures. The author itemizes various expenditures in order to arrive at the per ton cost of the oil additionally produced as a result of the applied secondary recovery methods. The total production cost of the oil produced additionally in 1955 was 2,181 thousand rubles and in 1956, 2,069 thousand rubles. Table 3 shows the itemized cost of the additional output of oil for 1955 and 1956. The fact that the expenditures increased at a faster rate than the additional oil production indicates that the effectiveness of the measures

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8/117/61/000/012/002/002  
A004/A101

AUTHOR: Klochko, V. S.

TITLE: On the efficiency of recovery of casting rejects

PERIODICAL: Mashinostroitel', no. 12, 1961, 34-35

TEXT: The author points out that casting rejects can be either recovered, i.e. welded up, built up, etc. or the rejected parts are remelted and the parts recast. Whether it is economically expedient to recover casting rejects depends on the recovery costs. Therefore, the author introduces the conception of "economically non-reparable" rejects, i.e. castings which it would not pay to recover because of the costs involved, although from the technological viewpoint such recoveries would be possible. A table shows an example where the percentage of rejects was cut from 7 to 5%, while the non-reparable rejects rose from 3 - 4% on account of an increase in the amount of castings that would be unprofitable to recover. Other tables presented by the author reveal the dependence between the growth in labor productivity and that of rejects, labor consumption of manufacturing 1 ton of serviceable castings depending on the foundry size and specialization level of the foundry respectively. To decide the problem of

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A004/A101

On the efficiency of recovery of casting rejects

expediency of remelting rejects or their recovery, it is necessary to compare the costs for the recasting of rejects and for their recovery. The author presents a comparative calculation example of the above costs and draws the conclusion that the method of rating the production efficiency of foundry shops by the tonnage of casting rejects, as it was practised hitherto, does not present a clear picture of the efficiency, but that the amount of rejects should be expressed in cost, since in many cases, particularly in foundry shops with highly mechanized or automated casting equipment, it is more expedient to remelt the rejects than to recover them, the latter requiring often a great amount of manual work which is more expensive than e.g. recasting the parts on highly mechanized casting machines. There are 1 graph and 4 tables.

Card 2/2

371:66  
8/035/62/000/004/051/056  
A001/A101

13.2941

AUTHOR: Klochko, V. S.

TITLE: The principle of negligible effect of errors

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 4, 1962, 34,  
abstract 40200 ("Tr. Khar'kovsk. inzh.-stroit. in-ta", 1961, no. 15,  
50-56)

TEXT: The mean-square error of the function  $y = f(x, x_1, \dots, x_n)$  of  
independent arguments is equal to

$$m_y = \sqrt{(\partial f / \partial x)^2 m_x^2 + (\partial f / \partial x_1)^2 m_{x_1}^2 + \dots + (\partial f / \partial x_n)^2 m_{x_n}^2}.$$

If the first component predominates over the rest, then  $m_y \approx m = (\partial f / \partial x) m_x$ .  
As a measure of negligible effect of the other components the following criterion  
is adopted:

$$k < \sqrt{\frac{\sum_{i=1}^n (\partial f / \partial x_i)^2 m_{x_i}^2}{m^2}}, \quad \text{X}$$

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A001/A101

## The principle of negligible effect of errors

whose estimate represents the purpose of the article. It is noted that different authors assume  $k = 0.1 - 0.7$ . The estimate  $k = \sqrt{2v/m}$  is recommended, where  $\mu = m/\sqrt{2v}$  is mean square error of determining  $m$  ( $v$  is the number of excessive measurements). In selecting the value of predominating error on auxiliary allowances, the error caused by the limiting error of rounding allowance  $\delta$  should be added to  $\mu$ ; it is equal to  $\mu_0 = \delta/2\sqrt{3}$ . The corresponding nomogram for determining  $k$  as a function of  $\mu$  is given, which was plotted on the basis of studying allowances of various instructions. At  $v$  being unknown, it is proposed to assume  $\mu$  equal to 0.07 - 0.1 of the magnitude of  $m$ . In this case  $k = 0.39 - 0.58$  ( $k = 0.4$  is recommended). It is noted that  $k$  less than 0.3 is difficult to bring about. There are 21 references. X

Z. Khaisov

[Abstracter's note: Complete translation]

Card 2/2

KLOCHKO, V.S.

Using low cement-content mortars for grouting supported areas.  
Ugol' Ukr. 5 no.10:33-34 0 '61. (MIRA 14:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut organizatsii  
i mekhanizatsii shakhtnogo stroitel'stva.  
(Grouting)

KLOCHKO, Yu.S.

Characteristics of a study, using a rock catcher, of wells  
exploited simultaneously along the pump-compressor pipes and  
the annular space. Gaz. delo no.8:18-21 '64.

(MIRA 17:9)

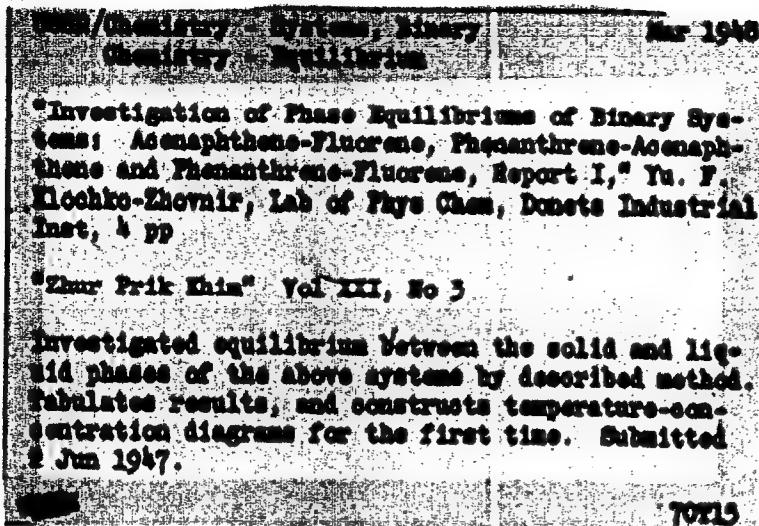
1. Stryyskoye gazopromyslovoye upravleniye.

GINER, R.F.; TKACHUK, A.I.; KLOCHKO, Yu.S.

Investigations of wells simultaneously exploited with respect to  
pipes and annular space. Gaz. delo no.12:14-17 '63. (MIRA 17:10)

1. Stryyskoye gazopromyslovoye upravleniye.

KLCCHKC-ZHCVNIR, YU. F.



KLOCHKO-ZHOVNIR, YU. P.

FA 67/49768

Chemistry - Binary Systems

Phase Rule

Aug 49

"Research on the Phase Equilibria of the Binary Systems: Acenaphthene - Fluoranthene, Phenanthrene - Fluoranthene, Fluorene - Fluoranthene and Naphthalene - Phenanthrene," Yu. P. Klochko-Zhovnir, Docto-  
ral Inst., 47 pp

"Zur Phys. Kond. Vol. XXII, No 8, 1292-1297

All four systems form mechanical mixtures rather than chemical compounds. They each have one eutec-  
tic: 66° for a 50-50 mixture of the first and fourth  
systems, 76° for a 53% phenanthrene mixture of the

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USER/Chemistry - Binary Systems (Contd) Aug 49

second, and 75.5° for a 45% fluorene mixture  
of the third. Submitted 1 Nov 48.

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CA

The ternary system phenanthrene-azophenone-naphthalene. Ya. P. Kharlam-Zhuravli. Doklady Akad. Nauk S.S.R. 70, 216-219 (1950) (r.c.). C.A. 44, 9191; 45, 3220. All the binary systems involved have been investigated previously, and all form simple eutectics with no compound formation or solid soln. The ternary system is equally complicated, with a ternary eutectic at 34% and coms. 24% phenanthrene and 29.5% azophenone. The 2-phase lines connecting the ternary eutectic with the binary eutectics are all straight; this indicates the simplicity of the system.

Arnold J. Miller

VAKHNIN, B.; SOLOV'YEV, N.; KLOCHKOV, A.

Reconstructing a two-row cow barn into a four-row barn. Sel'.  
stroi. 15 no.9:4-6 8 '60. (MIRA 13:9)

1. Direktor sovkhosa "Nizhegorodets" Dal'ne-Konstantinovskogo rayona, Gor'kovskoy oblasti (for Vakhnin). 2. Glavnyy inzhener sovkhosa "Nizhegorodets" Dal'ne-Konstantinovskogo rayona, Gor'kovskoy oblasti (for Solov'yev). 3. Starshiy prorab sovkhosa "Nizhegorodets" Dal'ne-Konstantinovskogo rayona, Gor'kovskoy oblasti (for Klochkov).

(Arctic regions--Fur farming)

KLOCHKOV, A. kand.tekhn.nauk, docent; KARYAKIN, V., assistant

Using gasoline and condensate as fuel for motor-vehicle engines.  
Trudy SADI no.16 pt.1.:156-162 '59. (MIRA 1):11)  
(Gasoline) (Telshanka--Condensate oil wells)

KLOCHKOV, A.A., aspirant

Obtaining weakly virulent strains of Brucella through the  
action of ultraviolet rays. Veterinaria 41 no.2:31 p '64.  
(MIRA 17:12)  
1. Vsesoyuznyy institut eksperimental'noy veterinarii.

PATSKIVICH, I.R., kandidat tekhnicheskikh nauk; KLOCHKOV, A.I.; ~~REZNIKIN~~,  
P.N., inzhener; BAUTINA, V.A.; SHAHMATOV, V.M.

Investigating the causes of paint deterioration in the vicinity of  
welds. Vop.svar.proizv. no.7:82-93. '55. (MLRA 10:3)  
(Paint) (Tractors--Welding)

KLOCHKOV, A.I., kand.tekhn.nauk

Organizing the maintenance of motor vehicles on collective farms  
of Saratov Province. Trudy SADI no.16 pt.1:211-219 '59.

(MIRA 13:11)

(Saratov Province--Collective farms)  
(Saratov Province--Motor vehicles--Maintenance and repair)

KLOCHKOV, A.I.; KUNINA, L.A.

Oligodynamic action of chemically pure metallic silver. Mikrobiologija  
29 no.3:428-432 My-Je '60. (MIRA 13:7)

1. Chelyabinskij politekhnicheskiy institut.  
(SILVER) (METALS AS ANTISEPTICS)

18.830025384  
8/080/61/034/002/003/025  
A057/4129AUTHORS: Klochkov, A.I.; Karelin, N.A.; Borovskaya, K.I.

TITLE: Effect of deformation by sliding and twinning on the rate of dissolving of zinc single crystals in hydrochloric acid

PERIODICAL: Zhurnal Prikladnoy Khimii, v 34, no 2, 1961, 272-277

TEXT: The effect of the orientation angle and deformation by sliding or twinning of zinc single crystals on the dynamics of the dissolving rate in 1 M HCl solutions was investigated. This problem is of interest since zinc and zinc alloy articles are manufactured using various types of plastic deformation, and corrosion resistance is effected by changes in the crystalline state. Corrosion of zinc polycrystals was investigated by several authors, but only Ye.M. Zaretskiy (Ref 2: ZhPKh, 24, 5-8, 482 (1951), and Ref 3: ZhPKh, 24, 2, 619 (1951)) studied the effect of deformation on corrosion. Zinc single crystals were investigated already by M. Straumannis. X

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25384

Effect of deformation ...

8/080/61/034 002/003/025  
A057/A129

those published by M. Straumainis (Ref 10). In a second series deformed single crystals were investigated by sliding and twinning, and the corroded crystals were photographed in polarized light (Fig 6, 8). The obtained results demonstrate that deformation by sliding increases the dissolving rate. Between the sliding faces some "weak" segments were formed and were strongly corroded. Deformation by twinning increases also the dissolving rate. Corrosion occurs in the zinc twins formed (in Fig 8 the deep bonds of twins are well visible) which have a higher chemical activity not only in the partition of the initial structure and the formed twin, but mainly in the bulk of the latter. Since twins formed by deformation are less corrosion resistant and appear after mechanical treatments of zinc or zinc alloy articles, thermal treatment should be carried out to destroy the twins formed by mechanical processing. Conditions for the thermal after-treatment should be investigated on zinc single crystals, since these are more suitable than polycrystals for this purpose. In connection with investigations of the corrosion resistance of zinc polycrystals the following authors are mentioned: S.Ya. Popov (Ref 11: "Vliyaniye nekotorykh

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Effect of deformation ...

3/080/61/034/002/003/025  
A037/A129

kationnykh i anionnykh dobavok na korroziyu tsinka i kadmiya v rastvore solyanoy kisloty" ("Effect of some cationic and anionic admixtures on corrosion of zinc and cadmium in hydrochloric acid solution"). Novosherkasskiy politekhn. inst. im. Ordzhonikidze (Novoscherekassk "Order of the Red Banner of Labor" Polytechnic Institute imeni Sergo Ordzhonikidze), Promstroyizdat, 25 (1954)), V.I. Rodionova (Ref 4: Dissertation M (1955)), M.P. Slavinskii (Ref 5: "Fiziko-khimicheskiye svyazи elementov" ("Physico-chemical properties of elements"), Metallurgizdat, 170 (1952)), G.V. Akimov (Ref 8: "Osnovy ucheniya o korrozii i zashchite metallov" ("Principles of the science of corrosion and protection of metals"), Metallurgizdat (1946)). There are 9 figures and 14 references: 13 Soviet-bloc and 1 non-Soviet-bloc. The English-language reference reads as follows: E.A. Anderson, M.L. Fuller, Metals and Alloys, 10, 9, 282 (1939).

ASSOCIATION: Kafedra khimii Chelyabinskogo politekhnicheskogo instituta (Department of Chemistry of the Chelyabinsk Polytechnic Institute)

Card 4/6

KLOCHKOV, A.M.

Connection between neurotic states and conditions of their emergence.  
Zhur. vys. nerv. deiat. 11 no. 5:908-914 S-0 '61. (MIRA 15:1)

1. Laboratory of the Physiology and Pathology of the Higher Nervous Activity, Institute of Normal and Pathological Physiology, U.S.S.R. Academy of Medical Sciences, Moscow. (NEUROSES) (CONDITIONED RESPONSE)

*KLOCHKOV, A. M.*

USSR/Human and Animal Physiology (Normal and Pathological).  
Nervous System. Higher Nervous Activity. Behavior.

T-12

Abs Jour : Nef Zhur - Biol., No 11, 1958, 51301

Author : Klochkov, A.M.

Inst : -

Title : The Problem of Interrelationship Between Conditioned and Unconditioned Reflexes.

Orig Pub : Zh. vyssh. nervn. deyut-sti, 1957, 7, No 2, 263-271

Abstract : Investigations of secretory unconditioned reflexes (UR; food and acidic reflexes) in 6 dogs showed that in all animals the course of UR becomes intensified under the influence of positive conditioned reflexes (CR) during the period when unconditioned stimuli are in action. Yet under the influence of differentiation UR becomes less pronounced during the same period. However, under the influence of both positive and inhibitive CR the total magnitude of salivary secretion changed in different

*Card 1/2 of Physiol. + Pathol. of Higher Nervous Activity. Inst Normal and Pathological Physiology AMS USSR*

KLOCHKOV, A. N., Cand Med Sci -- (dis.) "Influence of cortical processes of excitation and inhibition on unconditional reflexes." Moscow, 1957, 11 pp (Academy of Medical Sciences USSR), 200 copies (KL, 36-57, 107)

*KLOCHKOV, A. M.*

USSR/Soil Science, Soil Biology

J-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 43821

Author : Klochkov A. M.

Inst : Not Given

Title : The Use of Organic Mineral Fertilizer Mixtures

Orig Pub : S. kh. Povolzh'ya, 1957, No 3, 27-30

Abstract : The results of three year tests with organic mineral mixtures made at the agricultural experimental station and the kolkhozes of the Mordovian ASSR. Indications of the exactness of the experiment are not given.--V.V. Prokoshov

Card : 1/1

USSR / Cultivated Plants, General Problems. APPROVED FOR RELEASE: 06/19/2000. CIA-RDP86-00513R000723210007-9

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58489

Author : Klochkov, A. M.; Kostrov, K. A.; Koval'chuk, P. A.

Inst : Not given

Title : Occupied Fallows in Mordovia

Orig Pub : S.-kh. Povolzhya, 1957, No 12, 13-15

Abstract : No abstract given

Card 1/1

KLOCHKOV, Aleksandr Mikhaylovich, kand. sel'khoz. nauk; KELIN, I.,  
red.; POPOVA, N., tekhn. red.

[The soil map and its use] Pochvennaja karta i ee ispol'zovanie.  
Saransk, Mordovskoe knizhnoe izd-vo, 1960. 47 p. (MIRA 15:6)  
(Mordovia—Soils—Maps)

SIROTIN, Yu.P., kand.sel'skokhos. nauk; STAROV, M.V., agronom; PRONIN, M.Ye., prof.; KOSTROV, K.A., kand.sel'skokhos. nauk; KLOCHKOV, A.M., kand. sel'skokhos. nauk

Fall supplementary fertilizers for winter crops. Zemledelie 25 no.9: 16-34 S '63. (MIRA 16:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut udobreniy i agro-pochvovedeniya (for Sirotin). 2. Zaveduyushchiy Mikhaylovskim agro-tehnicheskim s'ezdou chastkoi Stavropol'skogo kraya (for Starov). 3. Voronezhskiy sol'skokhozyaystvennyy institut (for Pronin). 4. Mor-dovskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya (for Kostrov, Klochkov).

(Wheat—Fertilizers and manures)  
(Rye—Fertilizers and manures)

L 20794-65 EMO(1)/EMO(r)/EMT(1)/PS(r)-3/EMO(r)/EMO(s)/EMU(s) Po-5/Po-4/  
Pa-4 AFWL/ASD(s)-5/AEDC(s)/ASD(r)-3/AFD/AFDC(s)/EMO(s) 8/0299/64/000/016/A013/A013  
ACCESSION NR: ARI/046196

8/0299/64/000/016/A013/A013

SOURCE: Ref. zh. Biologiya. Svednyay tom, Abs. 16A109

AUTHOR: Kovalenko, A. F.; Kaplan, Ye. Ya.; Boyarkin, V. P.; Klochkov, A. N.

TITLE: Pathogenesis of hemodynamic disorders during supersonic airflow action

CITED SOURCE: Sb. Aviats. i kosmich. meditsina. M., 1963, 252-254

TOPIC TAGS: dog, supersonic airflow, biological effect, blood, hemodynamics, blood pressure, cardiovascular system, nervous system,

TRANSLATION: The effect of supersonic airflow (1600 km/hr) on the cardiovascular and nervous systems of dogs was determined in acute and chronic experiments. Shifts in cardiac muscle excitability and conductivity took place during airflow action. An increase in arterial pressure (by 10-15%) and blood circulation rate (by 15-20%) during increase in airflow speed took place due to the noise factor.

Card 1/2

L 20794-65

ACCESSION NR: AR4046196

(120 db). During direct airflow action, arterial pressure decreases (by 30-35%) and blood circulation rate is retarded (by 20-30%). After 30-60 min the hemodynamic disorders are similar to those of traumatic shock. Pressor reaction to carotid artery constriction was reduced by 20-30%. Excitability of the vasomotor and respiratory center increased under the influence of airflow noise and decreased during airflow impact action. The functional state of the sympathetic nerves changed in a similar manner. No significant changes were observed on the part of the parasympathetic innervation state during airflow noise and impact action. Airflow noise caused intensification of brain bioelectric activity. Bioelectric activity change in the cortex during impact airflow action attests to development of inhibiting processes. Activity of subcortical formations increased in some animals and decreased in others. Airflow effect on the organism was insignificant in cases when special protection was used.

SUB CODE: LS

ENCL: 00

Car: 2/2

KLOCHKOV, A.M., kand. sel'skokhozyaystvennykh nauk

Use of phosphate meal. Zemledelie 26 no.6:31-33 Je '64.  
(MIRA 17:8)

1. Morodovskaya gosudarstvennaya sel'skokhozyaystvennaya  
opytnaya stantsiya.

L 50066-65    EMG(j)/EMG(r)/EMG(v)/EMG(s)-?/EMG(c)/EMG(1)/PS(v)-?/PS-2  
A SESSION NR: AP5017648

UR/0219/65/060/007/0007/0012  
612.67-063:612.827-089

31

AUTHOR: Gazenko, O. G.; Grigor'yan, R. A.; Kitayev-Smyk, L. A.; Klochkov, A. N.

TITLE: Increased extensor tonus during weightlessness in cats with fully or partially removed cerebellum

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 60, no. 7, 1965, 7-12

TOPIC TAGS: weightlessness, biological effect, cat, cerebellum, vestibular reflex, extensor reflex, parabolic flight

ABSTRACT: To elucidate the role of the cerebellum in the formation of delayed and motor reactions to weightlessness, experiments were conducted on 4 cats, one with a completely removed cerebellum, another with a partially removed cerebellum, and 2 intact controls. Weightlessness was produced during parabolic flights in a special aircraft which was equipped with a test chamber and photographic equipment. Each animal was exposed to weightlessness 12 times. The duration of each weightless period was 28-30 sec, preceded and followed by 1.8-2.0 g for up to 15 sec. In some experiments weightlessness was created without prior accelerations, and in others blindfolds were used during the tests. Vestibular tests were conducted before and

Card 1/4

L 60066-65

ACCESSION NR: AF5017648

after weightlessness in both sighted and blind condition. Lifting reflexes of the head and extremities, jump preparation reflexes, reactions to tumbling, and righting reflexes were studied. Fig. 1 of the Enclosure shows how experimental and control animals reacted to weightlessness. The experiments showed that in cats with fully or partially removed cerebellums there was extensor rigidity during weightlessness. Similar manifestations were noted in intact animals, but to a lesser degree, and they disappeared upon adaptation to weightlessness. Animals with partially removed cerebellums showed sharply increased vestibular reflexes compared to intact animals or those with fully removed cerebellums. Animals with partially removed cerebellums also showed increased aggressiveness. Orig. art. has: 3 figures. (CD)

ASSOCIATION: none

SUBMITTED: 27 Feb 64

ENCL: 0

SUB CODE: LS

NO REF Sov: 006

OTHER: 012

ATD PRESS: 4058

Card 2/b

L 50046-65  
ACCESSION NR: AP5017648

ENCLOSURE: 01



Fig. 1. Animals during weightlessness

I - Intact animal during the 10th exposure to weightlessness; II - animal lacking cerebellum during the 11th

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000723210007-9

left hemisphere of the cerebellum  
during the 12th exposure to  
weightlessness.

Card 3/4

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CIA-RDP86-00513R000723210007-9"

L 60066-65

ACCESSION NR: AP5017648

ENCLOSURE: 02



Fig. 2. Reaction to tumbling

I - Intact animal. a - released from hand; b - after 0.25 sec; c - after 0.5 sec (full turn); d - after 0.75 sec; e - landing;  
II - animal lacking cerebellum;  
III - animal lacking half the cerebellum. a - released from hand; b - after 0.125 sec; c - after 0.25 sec (full turn); d - after 0.75 sec; e - landing.

Card 4/4

KLOCHKOV, A.P., inzh., red.; KHRIBOV, A.S., inzh., red.; MUNITS, A.P.,  
red.izd-va; PSHENICOVA, T.A., tekhn.red.

[Production standards for planning and research work paid for  
according to a piece-rate system] Normy vyrabotki na perekhode  
i isyakatel'skie raboty, opachivayushye odol'no. Moskva, Gos.  
izd-vo lit-ry po stroy., arkhit. i stroyt.materialam. Pt.13  
[Electric, power and blower stations; furnaces] Elektricheskie  
i vodokhoduvnye stantsii, kotel'nye. Section 3. [Hydro-  
electric power stations] Gidroelektrostantsii. 1958. 67 p.  
(NIRA 12:?)

1. Russia (1923- U.S.S.R.) Ministerstvo elektrostantsiy.  
(Heat engineering) (Hydroelectric power stations)

14(6);8(6)

PHASE I BOOK EXPLOITATION

SOV/1716

Vsesoyuznyy institut "Gidroenergoproekt." Leningradskoye otdeleniye

Turbinnoye oborudovaniye gidroelektrostantsiy; rukovodstvo dlya  
proyektirovaniya (Turbine Installations of Hydroelectric Power  
Stations; Design Manual) 2nd ed., rev. and enl. Moscow,  
Gosenergoizdat, 1958. 519 p. 6,200 copies printed.

Additional Sponsoring Agency: USSR. Ministerstvo elektrostantsiy.

Ed. (Title page): A.A. Morozov (Deceased), Doctor of Technical Sciences,  
Professor; Compilers: F.V. Anosov, Docent, Candidate of Technical  
Sciences; I.M. Gamus, Engineer; Yu.Ye. Garkavi, Engineer;  
G.S. Gol'shman, Engineer; A.A. Yevdokimov, Engineer; A.S. Yeremeyev,  
Engineer; A.Ye. Zhmud', Engineer; N.N. Kelareva, Engineer;  
A.P. Klochikov, Engineer; A.G. Lang, Engineer; E.Ya. Mengel', Engineer;  
A.A. Morozov, Professor, Doctor of Technical Sciences;  
G.M. Serebryakov, Engineer; I.N. Smirnov, Docent, Candidate of Technical  
Sciences; M.I. Smirnov, Docent; D.S. Shchavelev, Professor,  
Doctor of Technical Sciences; N.N. Shcherbinskaya, Engineer;

Card 1/13

## Turbine Installations (Cont.)

SOV/1716

(Leningrad Division, "Gidroenergoprojekt" Institute, Leningradskiy Politekhnicheskiy institut [Leningrad Polytechnical Institute], Leningradskiy Metallicheskiy zavod [Leningrad Metalworking Plant] Plant "Elektrosila", and Zavod pod"zemno-transportnogo oborudovaniya [Hoisting and Transport Equipment Plant]; Editorial Board: A.A. Morozov (Chief. Ed.) A.P. Klochkov, N.N. Kelareva, N.N. Kovalev; Ed.: A.L. Mozhevitinov; Tech. Ed.: A.A. Zabrodina.

**PURPOSE:** This book is a manual for engineers and technicians engaged in the design of hydroelectric power plant equipment, and also for students of power and power machine-building institutes and departments.

**COVERAGE:** The manual contains materials on turbine installations needed for designing hydroelectric power stations. Information based on modern achievements in Soviet turbine building are presented. Hydraulic designs of turbine flow passages and plotting of operating characteristics are discussed. Data are presented on turbine speed regulation and automatization of hydromechanical equipment, and on turbine auxiliary equipment, generators,

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CIA-RDP86-00513R000723210007-9

SOV/1716

Turbine Installations (cont.)

installation and repair. A section of the book is devoted to tabulated data and cross section drawings of various Soviet and non-Soviet turbine installations of hydroelectric power stations. Information on testing of turbines and technical conditions for designing and specifications for supplying adjustable-blade, radial-axial [mixed flow] and bucket-type turbines are presented in Appendices 1 and 2. Appendix 3 contains conversion tables for measures. The Director of the "Gidroenergoprojekt" Institute, Professor A.N. Voznesenskiy, Director P.M. Yanovskiy of the Leningrad Division of the Institute, and Chief Engineer B.M. Lyubchenko, of the Institute's Department of Standard Designs, rendered great assistance in organizing the work on the second edition. The Editorial Board thanks Professors F.F. Gubin, V.S. Kvyatkovskiy, and N.M. Shchapov, and Docent M.M. Orakhelashvili for comments on the first edition. There are no references.

Card 3/13

## Turbine Installations (Cont.)

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6/19/59

SOV/98-59-3-9/17

8(APPROVED FOR RELEASE: 06/19/2000) CIA-RDP86-00513R000723210007-9  
 AUTHOR: Klochkov, A.P., engineer

TITLE: The Problem of the Performance Reliability of the Regulator and Distributor of a Hydraulic Turbine  
 (K voprosu o nadezhnosti paboty regul'yatora i napravlyayushchego apparata gidroturbiny)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, <sup>28</sup> Nbr 3, pp 45-46 (USSR)

ABSTRACT: According to the author, there is no need to compute the full runaway speed of the rotor of a hydrogenerator, if the distributor of the turbine is reliable and its closing is secured by the simultaneously-acting emergency valve and emergency oil-pressure installation. The "Uralelektroapparat" plant reports that the weight of the rotor of the Krasnoyarsk GES and, consequently, the price of generators could be considerably reduced if the speed of the rotor was computed on a 160% increase in the number of normal revolutions instead of 200%. The author also advises actuating the emergency valve immediately and the

Card 1/2

SOV/98-59-3-9/17

The Problem of the Performance Reliability of the Regulator and Distributor of a Hydraulic Turbine

oil-pressure installation as soon as the number of revolutions reached 115-120% of the normal number. The author suggests cancelling the GOST provision calling for manufacturing plants to run the generator in the "racing regime" for 2 minutes. Turbine-construction plants must intensify research on preventing the turbine from racing.

Card 2/2

TODOROV, T.; KLOCHKOV, B.

The influence of precipitation and the agricultural plants on the  
surface runoff of the precipitation waters and soil erosion.

Khidro i meteorolog no.1:79-78 '60.

(KRAI 10:1)

(Precipitation (Meteorology))

(Plants) (Erosion) (Runoff)

KLOCHKOV, B., inzh.; KORYAKOV, V., inzh.

An honorary title imposes great responsibility. Avt. dor. 23 no. 5:4-5  
My '60. (MIRA 13:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut svyazi.  
(Moscow--Road construction workers)

KLOCHKOV, Boris

Results from studying certain types of terraces for planting  
orchard trees. Selskostop nauka [2] no. 2: 208-215 '63.

USPENSKIY, V.A.; RADCHENKO, O.A.; OLEBOVSKAYA, Ye.A.; SHISHKOV, A.P.;  
MEL'TSANSKAYA, T.N.; INDEBOM, F.B.; Prinimali uchastiyu:  
KOLOTOWA, L.F., khimik; CHAGINA, T.P., tekhnik; MASKINA, T.B.,  
laborant; VIKULINA, M.N., laborant; POLOVNIKOVA, I.A., fizik;  
PETROV, A.K., tekhnik; PONOMAREV, B.P., laborant; KHYAMYALXAYNIN,  
L.B., laborant; KLOCHKOV, B.M., laborant; RAGINA, G.M., vedushchiy  
red.; SAFRONOVA, I.M., tekhn.red.

[Basic processes of the transformation of bitumens in nature  
and the problems of their classification] Osnovnye puti pre-  
obrazovaniia bitumov v prirode i voprosy ikh klassifikatsii.  
Leningrad, Gos.nauchno-tekhn.izd-vo naft.i gorno-toplivnoi  
lit-ry Leningr.otd-nie, 1961. 314 p. (Leningrad. Vsesoiuznyi  
nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy,  
no.185). (MIRA 1514)

(Bitumen—Geology)

KLOCHKOV, B.I.

Experimental determination of the efficiency of a motor  
vehicle wheel. Avt.prom. no.8:4-6 Ag '60. (MIRA 13:8)

1. Stalingradskiy mekhanicheskiy institut.  
(Motor vehicles--Wheels)

KLOCHKOV, B.I.

Traction diagram for motor vehicles considering the efficiency  
of driving wheels. Avt. prom. 28 no. 7:16-18 Jl '62.  
(MIRA 16:6)

1. Volgogradskiy mekhanicheskiy institut.  
(Motor vehicles—Dynamics)

KLOCHKOV, B.V., inzhener.

Constructing bridge support foundations using boxes dropped into  
the water. Avt.dor. 19 no.4:22-23 Ap '56. (MLRA 9:8)  
(Bridge construction)

KLOCHKOV, B.V., insh.; KONYAKOV, V.P., insh.

Making reinforced concrete balustrades. Avt.dor. 22 no.8;14  
Ag '59. (MIRA 12:11)  
(Concrete construction--Formwork)

KLOCHKOV, B. V. insh.

Factors in assembling precast reinforced concrete bridge spans.  
Avt. dor. 22 no.9:10-11 8 '59. (MIMA 12:12)  
(Bridges, Concrete) (Precast concrete construction)

KLOCHKOV, B.Y., insh.; KORTAKOV, V., insh.

Introduction of new techniques and the role of research and  
norm-setting centers. Avt.dor. 23 no.3:3 of cover Mr 60.  
(MIRA 13:6)  
(Read construction)

KLOCHKOV, B.V., inzh.

Constructing precast reinforced concrete highway viaducts. Transp.  
stroi. 10 no.4:24-27 Ap '60. (MIRA 13:9)  
(Viaducts)

PISHCH, G.S., inzh.; PANKRATOV, V.M., inzh.; KLOCHKOY, B.V.

Modern designs of span structures. Avt.dor. 23 no.11:15-17  
N°60. (MIRA 13:11)  
(Bridges, Concrete) (Viaducts)

KLOCHKOV, B.I., assistant

Investigating the efficiency and skidding of an automobile wheel.  
Isv.vys.ucheb.zav.; mashinostr. no.4:154-160 '61. (MIRA 14:6)

1. Stalingradskiy mekhanicheskiy institut.  
(Automobiles—Wheels)

CHARUYSKIY, A. P.; KLOCHKOV, B. V.; BULANTSEV, V. I.

Suspended assembly of spans with dry joints. Avt. dor. 25  
no. 10:17-19 0 '62. (MIRA 15:10)

(Bridge construction)

DUDCHENKO, N.P., inzh.; KLOCHKOV, B.V., inzh.; KORYAKOV, V.P., inzh.

Construction of temporary footings out of reinforced concrete  
pipes or shells. Transp. stroi. 12 no.8:20-22 Ag '62.  
(MIRA 15:9)

(Bridges—Foundations and piers)  
(Precast concrete construction)

KLOCHKOV, B.V., inzh.; KORYAKOV, V.P., inzh.; IVANOV, S.S., inzh.

The concrete reinforcement worker I.A. Vivehar and his brigade  
of communist labor. Transp. stroi. 12 no.9:7-8 3 '62. (MIRA 16:2)  
(Reinforced concrete)

FISHER, Grigorij Semenovich; KLOCHKOV, Boris Vasil'evich;  
GIBSHMAN, M.Ye., red.

[Prestressed bridges of manufactured elements] Predvari-  
tel'no napriashennye mosty iz elementov zavodskogo izgo-  
tovleniya. Moskva, Transport, 1964. 140 p.  
(MIRA 17:5)

*KLOCHKOV, D. S.*

FLEROV, G. V., KLOCHKOV, D. S., SKOBKIN, V. S., and TERTENT'YEV, V. V.

(Acad. Sci. USSR)

"On the Stability of Proton,"

paper submitted at the AllUnion Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-27 Nov 57.

• KLOCHKOV, D. S.

• AUTHORS: Flérov, G. N., Corresponding Member AN USSR, 20-1-19/58  
Klochkov, D. S., Skobkin, V. S., Terent'yev, V. V.

• TITLE: The Spontaneous Fission of Th<sup>232</sup> and the Stability of  
Nucleons (Spontannoye deleniye Th<sup>232</sup> i stabil'nost' nuklonov)

• PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 1, pp. 69-71 (USSR)

• ABSTRACT: First the authors shortly report on respective earlier works. Many a thing spoke in favor of the determination of the half-life period of the spontaneous fission of Th<sup>232</sup> by means of an essential increase of the sensitiveness of the method. Such an increase of the sensitiveness can be reached by an increase of the total quantity of experimental material as well as by a decrease of the background. The advantages of proportional counters are mentioned. The counters used here were produced of thin aluminum tubes. Thorium was deposited in form of ThO<sub>2</sub> with bakelite lacquer on inner surface of the semi-cylindrical grooves in the cathode of the counter. As anode served Nichronium wires with a diameter of 50  $\mu$ . The counters were filled with methane and had a wide proportionality range. For the increase of the total quantity of the experimental material some counters of the same type were used. Special attention was paid to the decrease of the

Card 1/2

The Spontaneous Fission of  $\text{Th}^{232}$  and the Stability of Nucleons 20-1-19/58

background. Possible reasons for errors e. g. neutrons, are pointed out. From the measurements discussed here the following results: the half-life period of  $\text{Th}^{232}$  is (if thorium suffers a spontaneous fission at all) more than  $10^{21}$  years. If we accept the condition that thorium nuclei, because of the decay of a nucleon, are divided into lighter particles the life of the compound nucleon is more than  $10^{23}$  years. By means of the here discussed method for the registration of rare fission acts the authors also searched for transuranium elements in monazite minerals. For this purpose monazites from different deposits of an age of more than  $10^7$  years were investigated. For the plutonium content a value of  $< 10^{-15}$  % was obtained. There are 5 references, 1 of which is Slavic.

SUBMITTED: October 4, 1957

AVAILABLE: Library of Congress

Card 2/2

KARAMYAN, A.S. [deceased]; DOROFEEV, G.A.; KLOCHKOV, D.S.

Neutron emission from strongly excited nuclei. Zhur. eksp. i teor. fiz. 40 no.4:1004-1006 Ap '61. (MIRA 14:?)  
(Nuclear reactions) (Neutrons)

KLOCHKOV, D.V.

"On Some Physiological Age Processes in the Training of Orel  
Race Horses";

dissertation for the degree of Candidate of Agricultural Sciences  
(awarded by the Timiryazev Agricultural Academy, 1962)

(*Izvestiya Timiryazevskoy Sel'skokhozyaistvennoy Akademii, Moscow, No. 2,*  
1963, pp 232-236)

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Diurnal activity of minks of various genotypes and their  
reaction to photoperiodic conditions. Biul. MOIP. Otd. biol.  
70 no.2:116-112 Mr-Apr '65. (MIRA 18:5)

BELYAYEV, D.K.; KLOCHKOV, D.V.; ZIELEZNOVA, A.I.

Effect of light on the reproductive function and fecundity of the  
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Mr-Ap '63. (MIRA 17:2)

KLACKOV, G.; SMIRNOV, N.

Gratator Vladivostok. Zhil stroi. no.6:C-9 Je '61.

(MTR 14:7)

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(for Klackov). 2. Glavnyy arhitektor Vladivostoka (for  
Smirnov).

(Vladivostok--Construction industry)

KLOCHKOV, G.A.; KHLISTUNOV, V.N.

High-speed digital millivoltmeter. Priborostroenie no.11;  
16-20 N '63. (MIRA 16:12)

ACC NR: AR6027478

SOURCE CODE: UR/0044/06/000/005/V043/V044

AUTHOR: Klochkov, G. D.; Nikolayev, I. A.; Puzyrevskiy, V. F.; Simonovich, I. V.

TITLE: A specialized digital computer

SOURCE: Ref. zh. Matematika, Abs. 5V311

REF SOURCE: Sb. Vopr. vychisl. matem. i vychisl. tekhn. Rostov-na-Donu, Rostovsk. un-t, 1965, 136-142

TOPIC TAGS: digital computer, algebraic equation, linear equation, special purpose computer, computer design

ABSTRACT: A specialized digital computer developed by the RCU computer center and designed for solution of the following system of linear algebraic equations

$$\sum_{i=1}^4 (y_{ij}x_i - (z_j - y_{ij})) = 0, \quad \sum_{i=1}^4 x_i = 1. \quad (1)$$

is described. In this system,  $x_i$  ( $i = 1, 2, 3, 4$ ), independent weighing concentrations;  $z_j$  ( $j = 1, 2, 3, 4$ ), assigned parameters;  $y_{ij}$  ( $i, j = 1, 2, 3, 4$ ), coefficients obtained as solutions of the following system of linear algebraic equations:

$$\sum_{i=1}^4 y_{ij}x_i = z_j, \quad (j = 1, 2, 3, 4). \quad (2)$$

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$$\sum_{i=1}^4 y_{ui}x_{ij} = z_{ui}x_{ij} \quad (j=1,2,3,4,5). \quad (3)$$

$$\sum_{i=1}^4 y_{ui}x_{ij} = z_{ui}x_{ij} \quad (j=1,2,3,4,5). \quad (4)$$

$$\sum_{i=1}^4 y_{ui}x_{ij} = z_{ui}x_{ij} \quad (j=1,2,3,4,5). \quad (5)$$

Equation systems (1), (2), (3), (4), and (5) are overdetermined and of the same kind. The method of least squares is used to reduce them to normal. The normalized equation systems obtained are solved with the compact Gauss scheme. The article presents the bit circuit of the internal memory cell consisting of 28 bits, the operational scheme of the 7-operation specialized digital computer, and a block diagram of the wired-in program. The computer block diagram consists of input and output units, memory devices, and a computer control system. All the devices are based on three typical electronic circuits: triggers, driver amplifiers, and gates. All the electronic circuits are designed to incorporate semiconductor and ferrite elements.

[Translation of abstract] V. Slepnev

SUB CODE: 09, 12

DOVGANOVSKIY, N.P.; KLOCHKOV, G.D.; NIKOLAYEV, I.A.; SINEL'NIKOV, D.Ye.;  
YATSENKO, M.I.

Application of electronic computers in the calculation of  
transient and steady processes in some types of electric  
circuits. Trudy RIIZHT no.44:201-215 '64.

(MIRA 19:1)

ACC NR: AR6028108

SOURCE CODE: UR/0372/66/000/005/V043/V044

AUTHOR: Klochkov, G. D.; Nikolayev, I. A.; Puzyrevskiy, V. F.; Simonovich, I. V.

TITLE: A special purpose digital computer

SOURCE: Ref. zh. Kibernetika, Abs. 5V311

REF SOURCE: Sb. Vopr. vychisl. matem. i vychisl. tekhn. Rostov-na-Donu, Rostovsk. un-t, 1965, 136-142

TOPIC TAGS: digital computer, special purpose computer, computer design

ABSTRACT: A special-purpose digital computer is described which is intended for the multiple solution of the following system of linear algebraic equations

$$\sum_{i=1}^4 (y_{ij}x_i - (z_j - y_{ij})) = 0, \quad \sum_{i=1}^4 x_i = 1. \quad (1)$$

In this system  $x_i$  ( $i=1,2,3,4$ ) are the unknown weight concentrations;  $z_j$  ( $i=1,2,3,4$ ) are the given parameters;  $y_{ij}$  ( $i,j=1,2,3,4$ ) are the coefficients obtained as solutions of the following systems of linear algebraic equations:

$$\sum_{i=1}^4 y_{ij}x_i = z_j, \quad (j=1,2,3,4,5). \quad (2)$$

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UDC: 681.142.001.3:51

ACC NR: AR6028108

$$\sum_{i=1}^4 y_{1i}x_{ij} = s_{1j}x_{ij} \quad (j=1,2,3,4,5), \quad (3)$$

$$\sum_{i=1}^4 y_{2i}x_{ij} = s_{2j}x_{ij} \quad (j=1,2,3,4,5), \quad (4)$$

$$\sum_{i=1}^4 y_{3i}x_{ij} = s_{3j}x_{ij} \quad (j=1,2,3,4,5). \quad (5)$$

Systems (1), (2), (3), (4), (5) are overdetermined and are of the same kind. They are reduced to the normal form by the least-squares method. The systems of normal equations thus obtained are solved by the compact Gauss method. The worth length of an immediate-across memory cell consisting of 28 characters is given. Transistor-magnetic flip-flop, driver amplifier, and gated circuits are used in all computer components. [Translation of abstract] V. Alekperov

SUB CODE: 09

Card 2/2

AUTHOR: Klochkov, I. 27-58-6-19/35

TITLE: Foremen Are Learning (Mastera uchatsyn)

PERIODICAL: Professional'no-Tekhnicheskoye Obrazovaniye, 1958, № 6,  
p 23-24 (USSR)

ABSTRACT: Foremen in charge of industrial education have a very important role to fulfill, and to cope with it they must study latest developments in various fields of industry. In 1955, about 3,000 foremen were studying in different courses. In 1957, this number increased to 9,000. Each oblast' has a special Labor Reserves Administration which organizes courses for foremen who visit plants and mines and are shown the most modern methods of work.

Card 1/1

1. Education-USSR 2. Instructors-Training

KLOCHKOV, I.

Textbooks, aids, and posters from the "Vysshiaia shkola"  
Publishing House. Prof.-tekhn. obr. 22 no. 12+10-11 D '65  
(MIRA 19:1)